



# Toward Car Free Key West

by Mary Bishop

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1. What seems to be the problem?

2. Key findings

3. What does it all mean?

4. What now?



# Part 1

What seems to be the problem?

The island of Key West is 4.5 miles long and 2.5 miles across



and receives over 2.5 million visitors each year,  
“stretching the demands of the transportation  
sector beyond capacity.”

(Insights, Inc., 2013)

# Problem Statement

Despite its compact size and walk-able and bike-able nature, 82% of visitors arrive with a vehicle.

(Insights, Inc., 2013)

Between 1996 and 2013, the number of visitors increased 87.7%, from 1,418,100 to 2,665,500 visitors annually.

(Insights, Inc., 2013)

Among the island's 24,000 residents, "Traffic Congestion" ranks as the #1 quality of life concern.

(Harris & Harris, 2004)

# The Tourist Perspective (Insights, Inc., 2013)

In 2008 Monroe County TDC found that tourists ranked the Florida Keys 3<sup>rd</sup> only to Hawaii and California as where to go for a “green” vacation.

Those tourists named “green transportation at destination” the number one thing they were seeking in green travel.

Green is a shared mentality for Lifestyles of Health and Sustainability (LOHAS), who want to “get away from it all”.

# Literature Review:

Policy change works best when combined with grassroots efforts from within communities

(CUTR, 2015; Frey & Stutzer, 2006; Ockwell, et al., 2009; Seyfang & Smith, 2006)

In successful cases of reducing vehicle use, the policy employed was combined with a substantial infrastructure investment to improve public transportation

(Cairns, 2010; Petrunoff et al., 2015; Transport for London, 2002; Transport for London, 2006)

It is important for behavior *maintenance* that the alternative be perceived as reasonably simple, comfortable, affordable, and time efficient

(Gardner & Abraham, 2007)

# Methodology

Based on 2,665,500 annual visitors, 385 surveys were needed for  $p=.05$  (95% CI, 5% margin of error)

## Study targets cutting tourist cars on island



ROB O'NEAL/The Citizen

Mary Bishop, an intern with the Key West Planning Department, left, speaks with Orlando resident Jeff Liconas about visitors' driving habits in the Florida Keys on Tuesday at the Southernmost Point.

BY SCOTT UNGER

Key West Citizen

A new study by the Key West Planning Department is researching ways to reduce the number of tourist cars on the island.

The city has partnered with the University of South Florida's Center for Urban Transportation Research and the Patel College of Global Sustainability to look at various options for cutting down congestion through tourist surveys

and research.

USF graduate student Mary Bishop is interning with Sustainability Coordinator Alison Higgins on the study. The pair started with assumptions and data on travel habits and designed the survey around them.

"We had a couple assumptions; one of them was that on your first trip to Key West you rent a car and on subsequent trips you don't," Higgins said.

See DRIVING, Page 7A

Surveys were conducted both in-person (255) at the Southernmost Point Buoy and Key West Express Ferry terminal and online (215)



# Research Questions

## Central Research Question:

What options, incentives, or disincentives could the City of Key West offer first time visitors that would successfully prevent a vehicle arrival?

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## Additional Questions:

- Which alternatives to driving were (or would be) considered?
- What barriers must be overcome in to utilize public transportation?
- What benefits are offered from not having a vehicle?
- Who is responsible for car traffic? Who is not?
- Who are the priority groups for reducing car traffic?

# Community Based Social Marketing

## (CBSM) Steps:

1. Select behavior hoping to change
2. Identify barriers and benefits
3. Develop strategies (based on step 2) to motivate behavior change
4. Pilot program
5. Broad-scale implementation and evaluation

(McKenzie-Mohr, 2013)



## Part 2

## Key Findings



# Key Findings

49% reported *walking* as their primary form of transportation while visiting

Nearly 1/3 of visitors reported not using a car at all during their visit

Transportation arrival choices change over number of visits

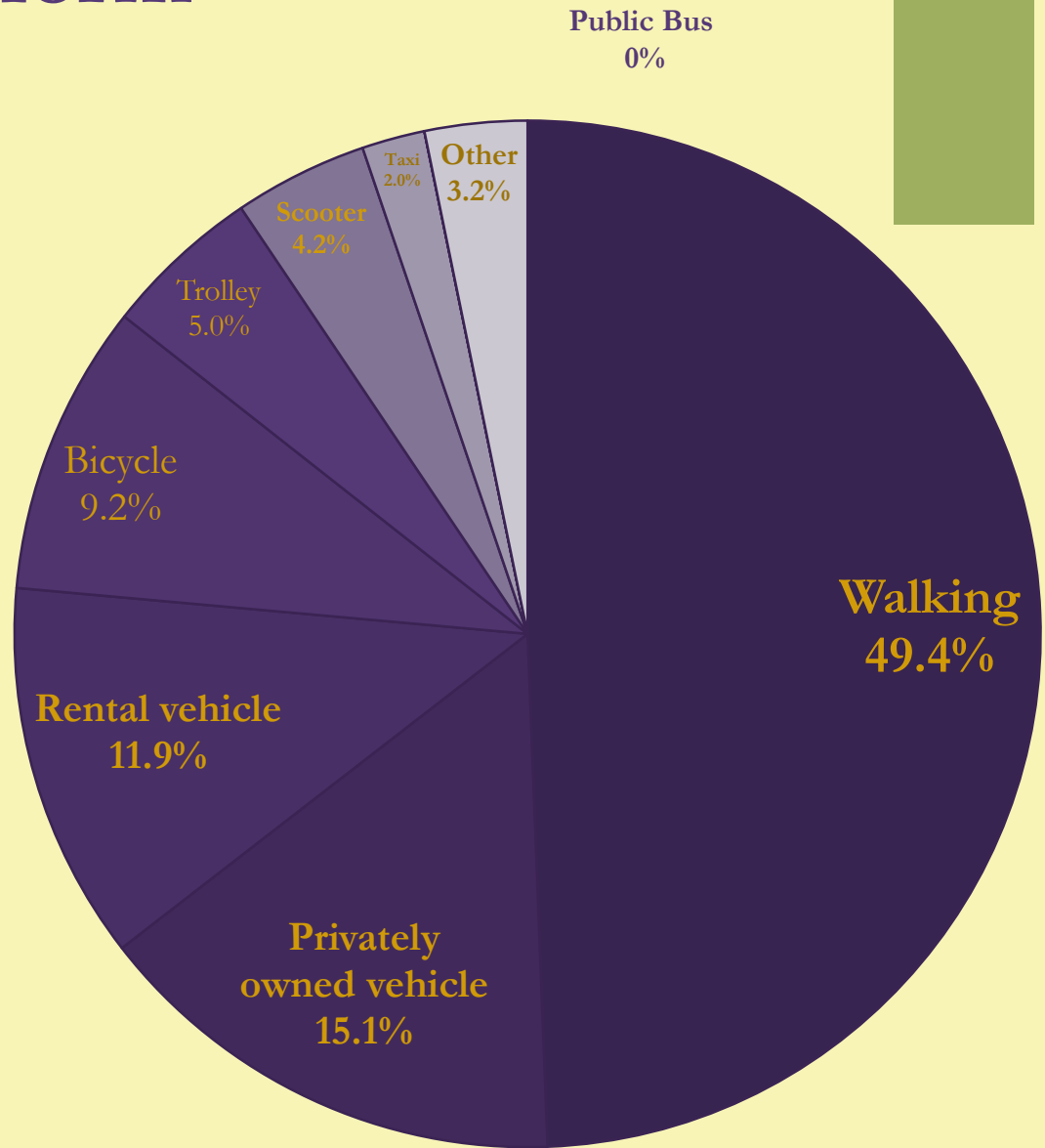
Barriers and Benefits:

Community Based Social Marketing

“Key” Findings ☺

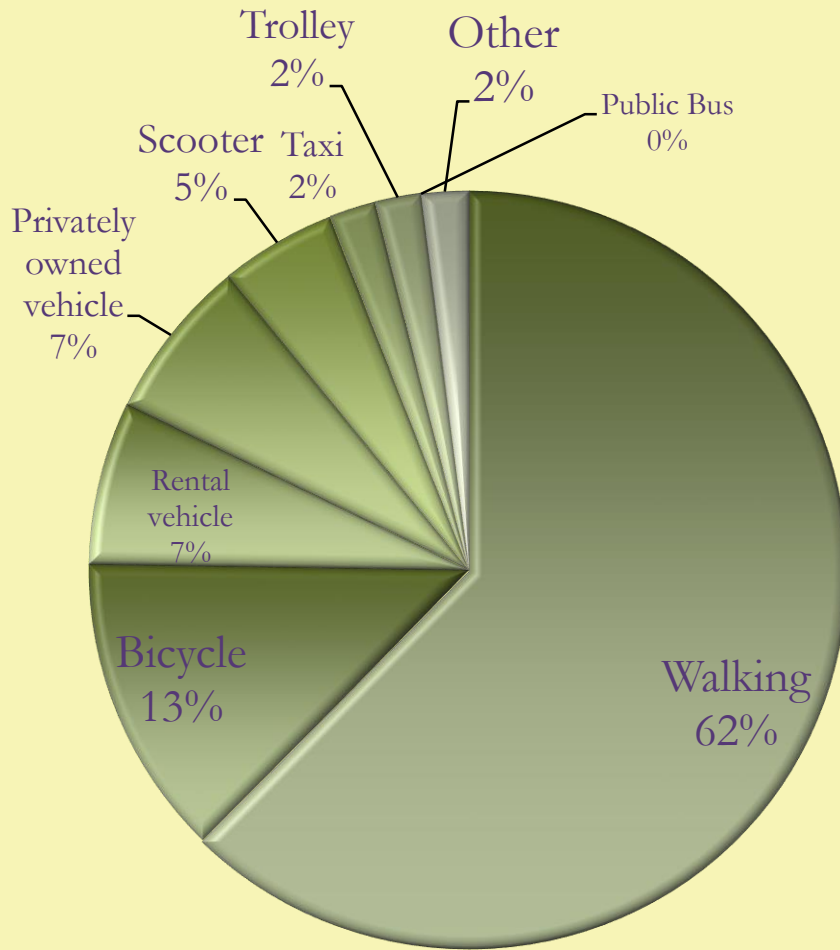
# + Walking primary form of transportation during visit:

- Overall, 49% of those surveyed reported *walking* as their primary form of transportation
- Primary form reported was different between accommodation locations, number of visits, and vehicle type (personal vs. rental)



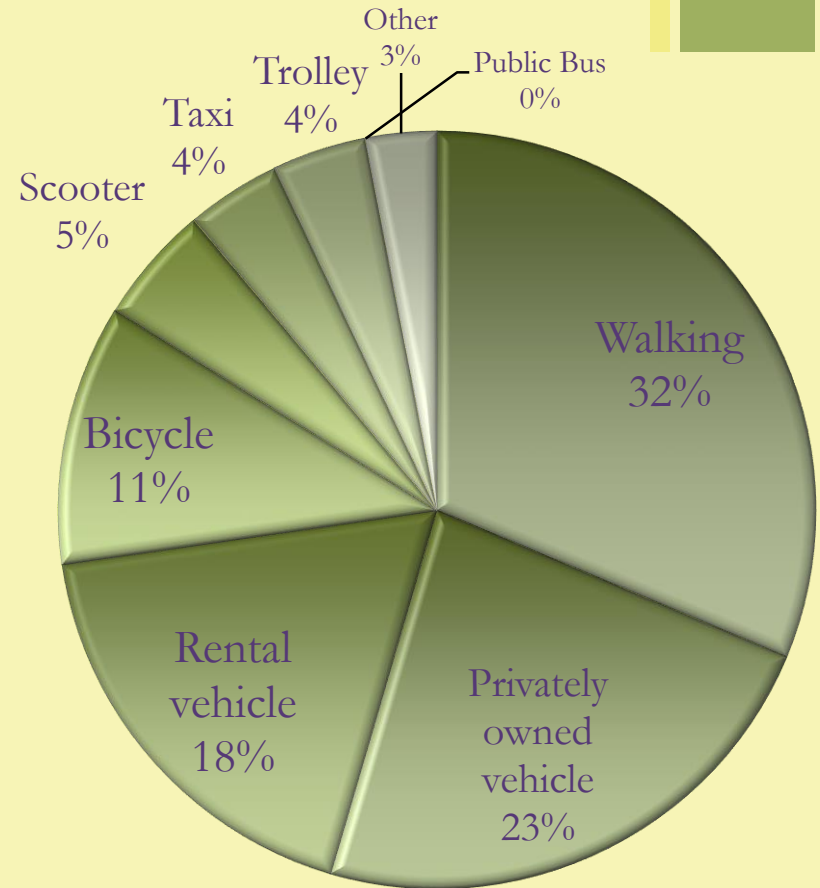
N=398

# + Primary form of transportation differs by accommodation location on Key West



**Old Town**

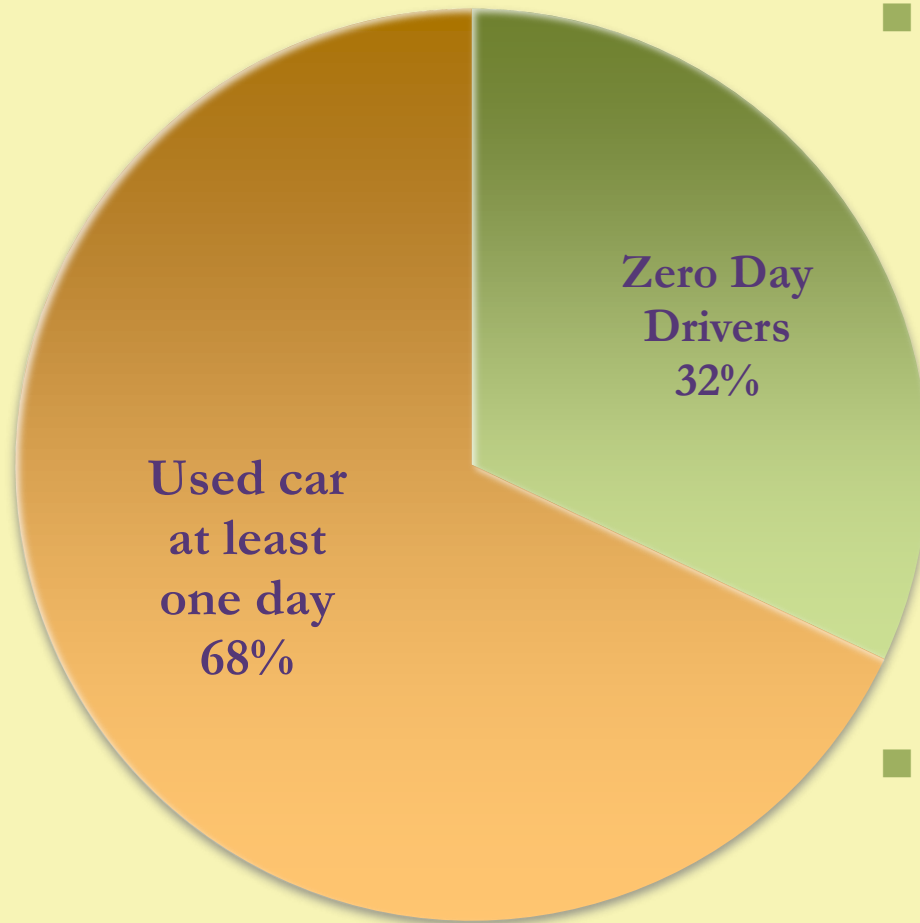
*n*=191



**Outside of Old Town**

*n*=93

# + Nearly 1/3 of visitors never used a car.

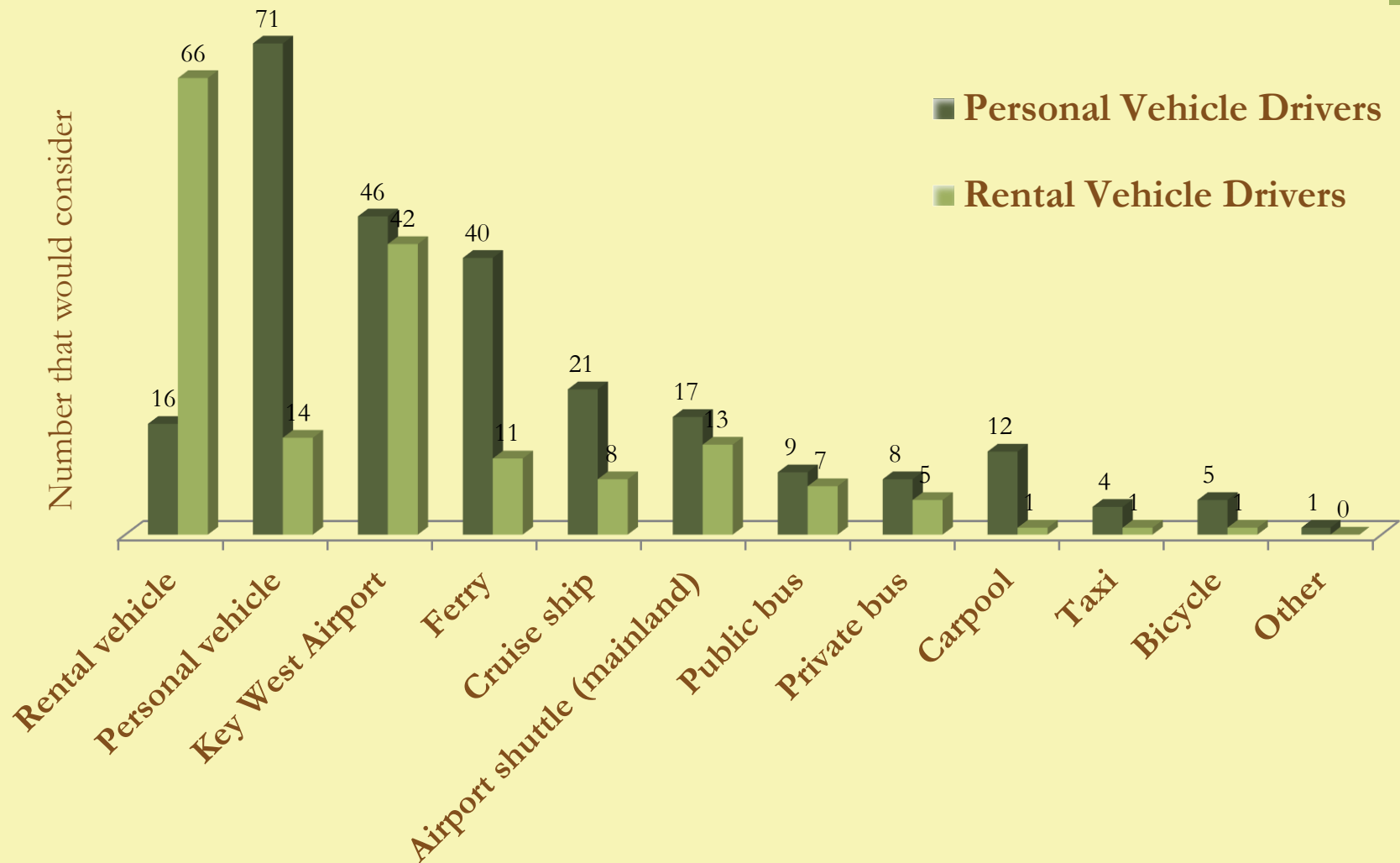


- Most *Zero Day Drivers* arrived via the Key West Airport or Key West Express Ferry.
- Of those arriving to the Key West Airport, 67% answered that they did not use a car at all during their visit.
- For the Key West Express arrivals, 78% answered that they did not use a car at all during their visit.



# Transportation arrival considerations change over number of visits:

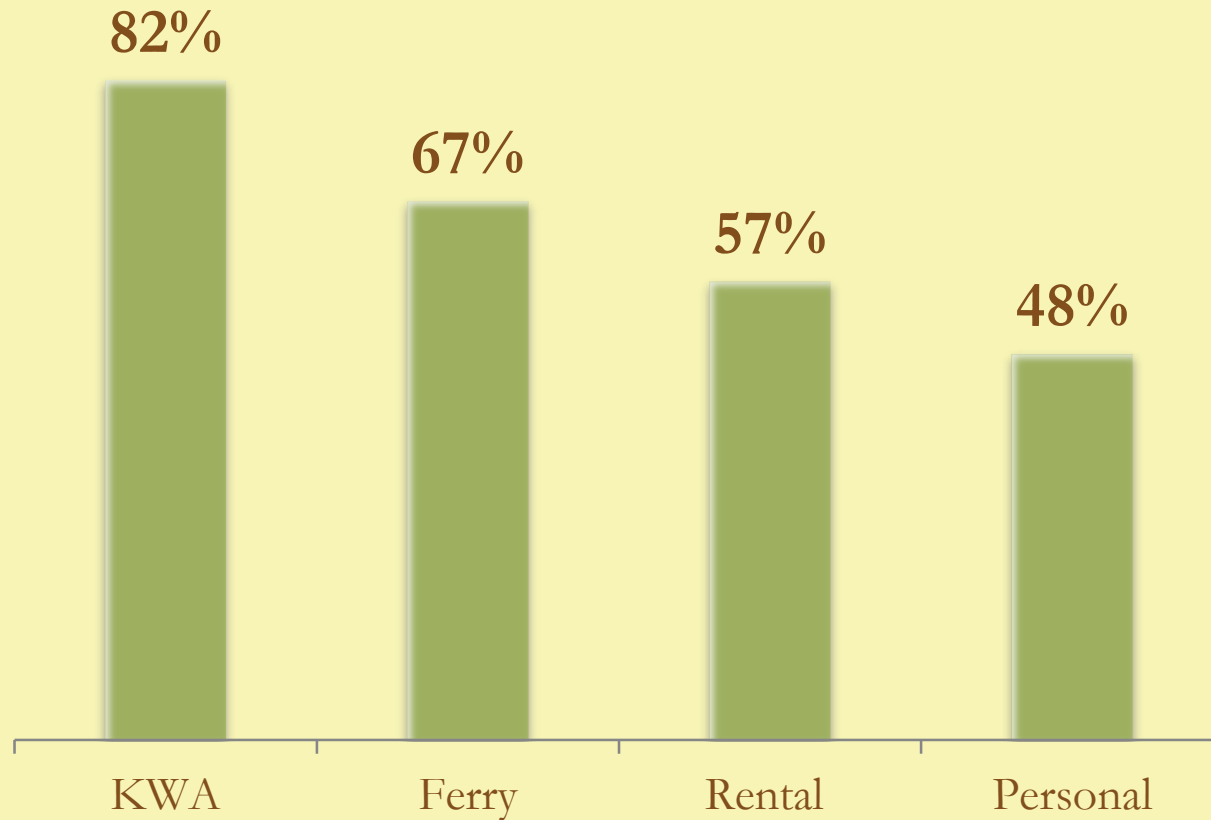
What options would personal and rental vehicle drivers consider next trip?





# Visitor Satisfaction

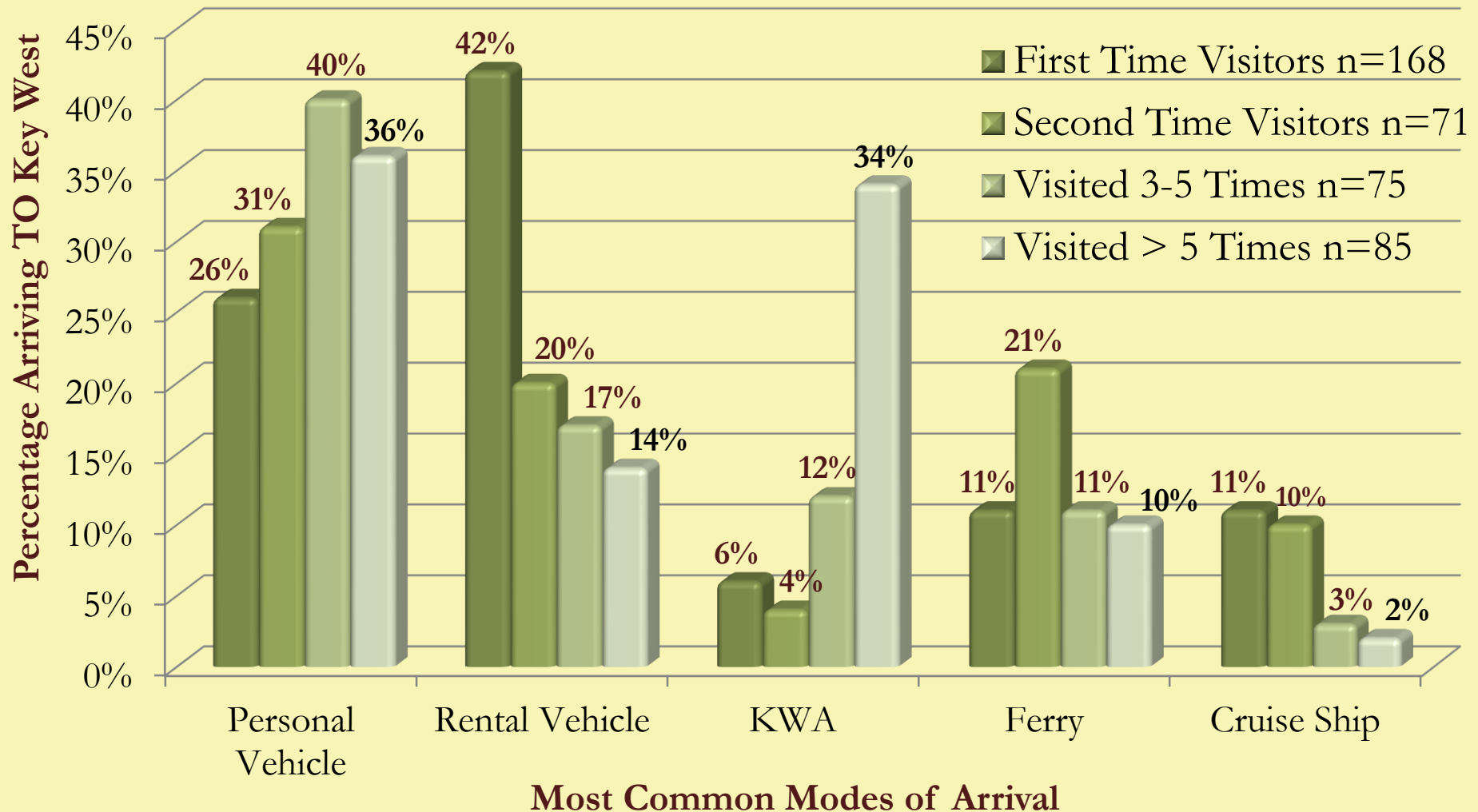
Visitors who 'would consider' arriving  
the same way next trip





# Transportation arrival choices change over number of visits:

Mode of Arrival by Number of Visits



# Benefits of Car Free Travel

1

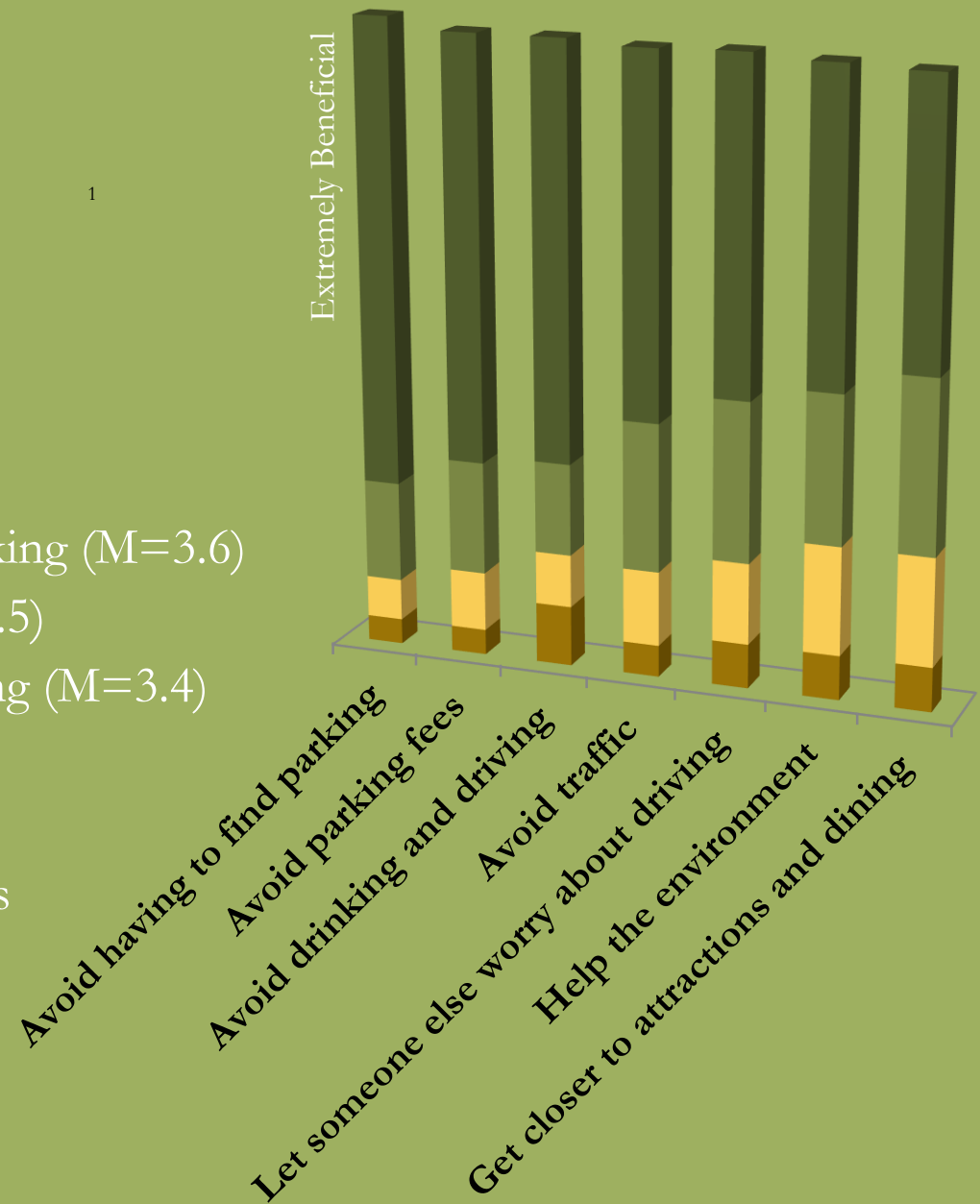
1 – Not at all Beneficial

4 – Extremely Beneficial

Top 3 Benefits:

- Avoid having to find parking (M=3.6)
- Avoid parking fees (M=3.5)
- Avoid drinking and driving (M=3.4)

All benefits of car free travel were most frequently rated as Extremely Beneficial



# Barriers of Public Transportation

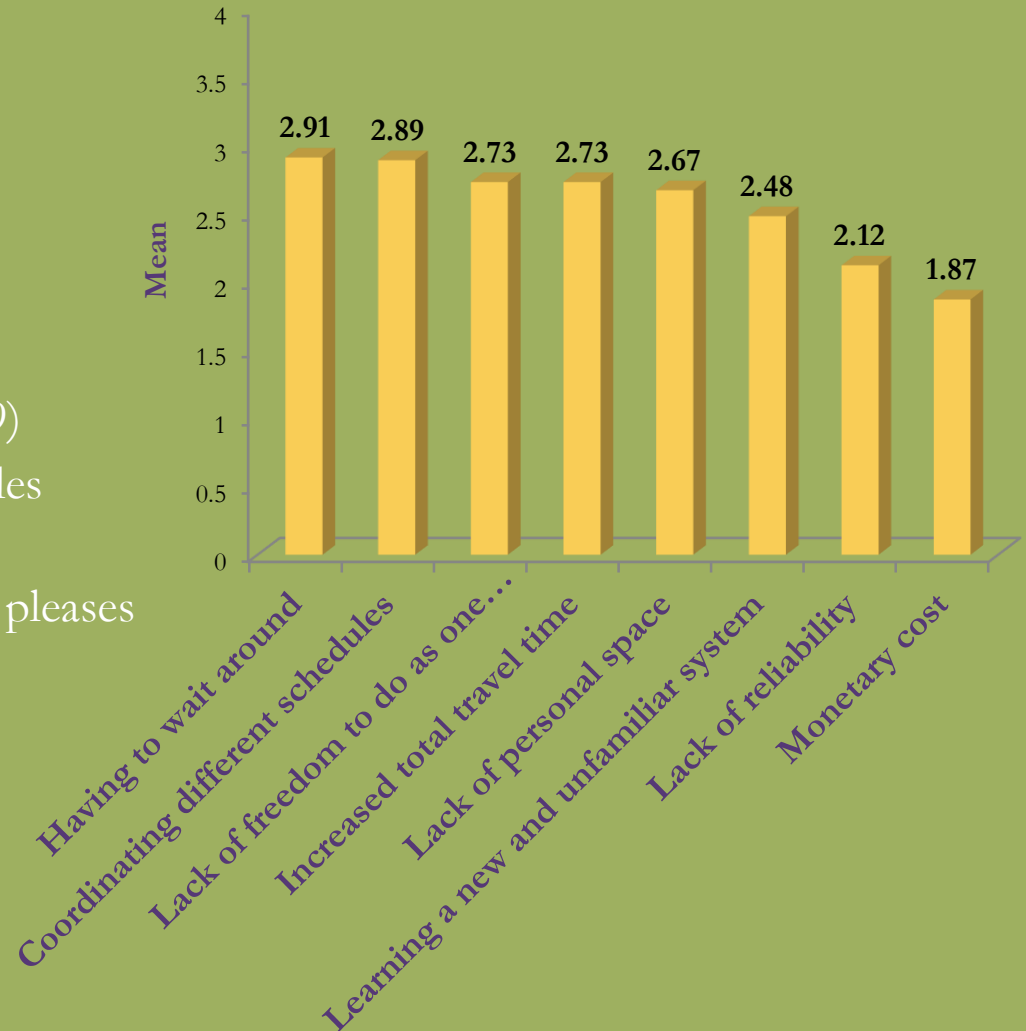
1- Not at all Challenging  
4- Extremely Challenging

Top 3 Challenges:

- Having to wait around (M=2.9)
- Coordinating different schedules (M=2.8)
- Lack of freedom to do as one pleases (M=2.7)

Monetary Cost received  
lowest mean score (M=1.87)

How Challenging are  
the following aspects of  
Public Transportation?



# Disincentives to Driving

## Renters and Personal Drivers Only

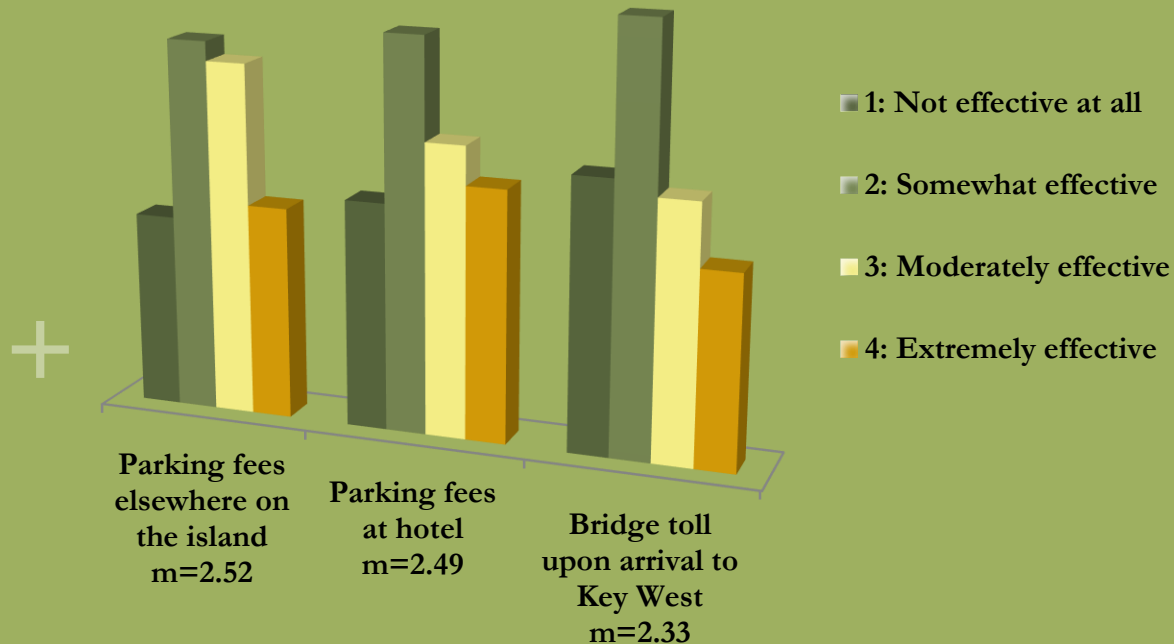


Table 1: Disincentives have relatively little effect on personal vehicle drivers (n=147)

Parking Fees Hotel	0.01	Not Affective at all	t=3.2, p=.00, n=135
Parking Fees Elsewhere	0.01	Not Affective at all	t=2.9, p=.00, n=132
Bridge Toll	0.02	Not Affective at all	t=2.6, p=.01, n=133



## Part 3

What does it all mean?

# Analysis

Identify  
Priority  
Groups

- Where are the majority of cars coming from?
- Which arrival types use cars the least?



What options  
would they  
consider?

- What options would they consider next trip?
- Planning based on Barriers and Benefits



Marketing

- Promote low car use arrival types
- Promote “Car-free as Carefree”

# Identifying priority groups and looking at their considerations and desires

56% of personal vehicle drivers are from southern Florida

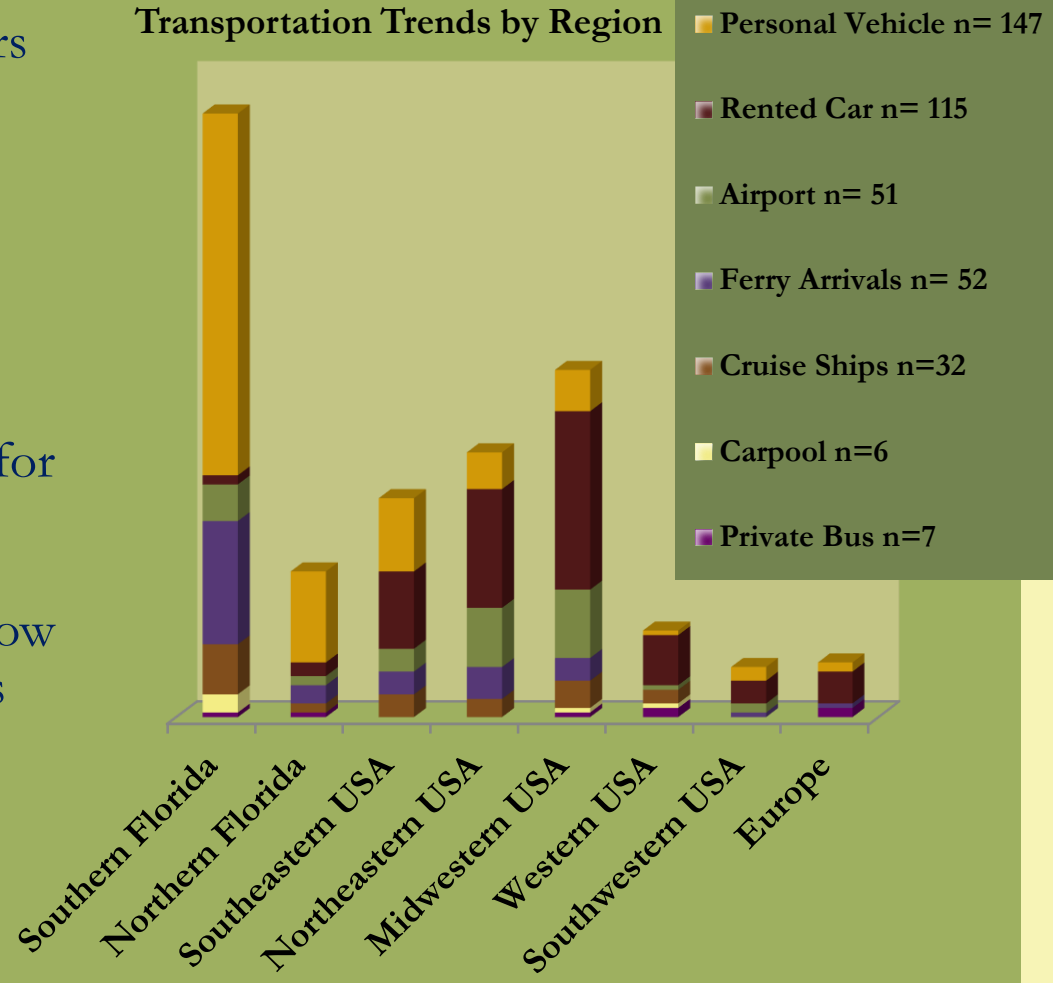
35% of rental car drivers are from the Midwest

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Both groups considered and would consider other options for next trip

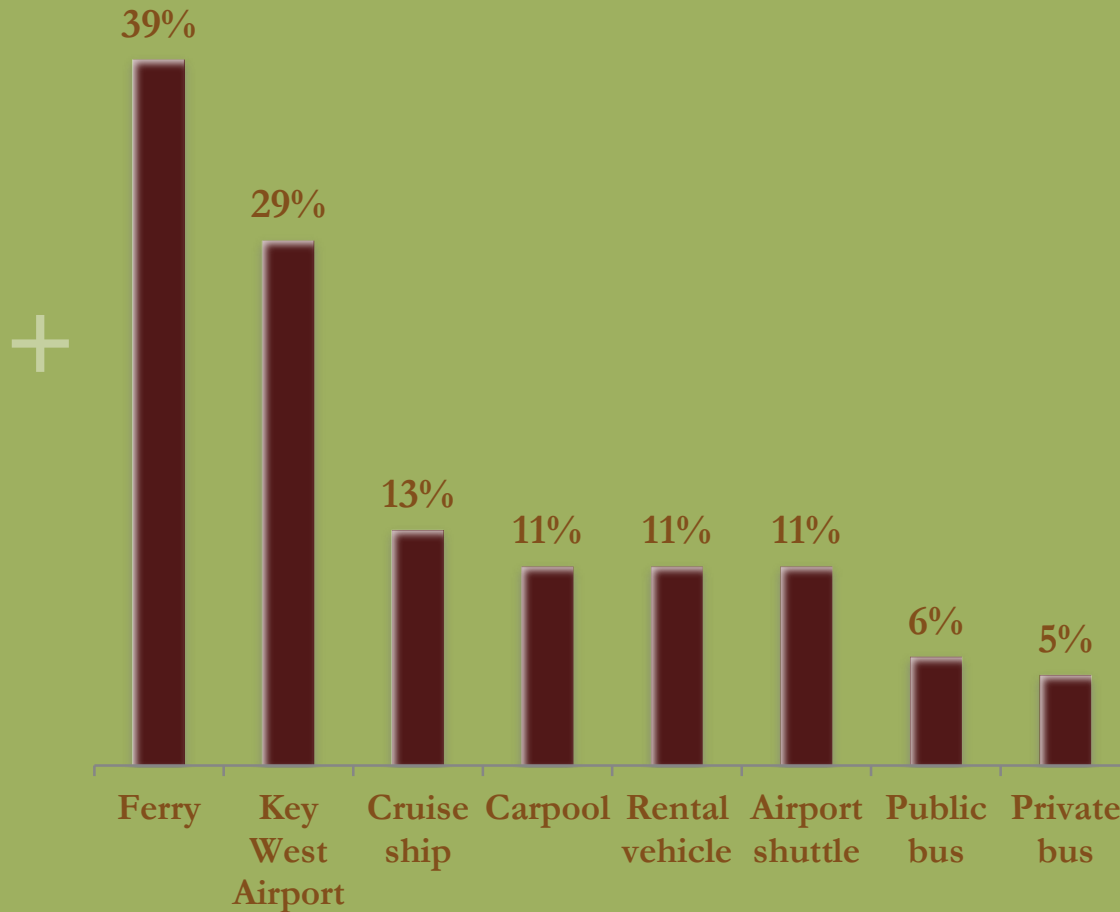
Next steps: How to promote low car use options? What changes can be made?

Transportation Trends by Region



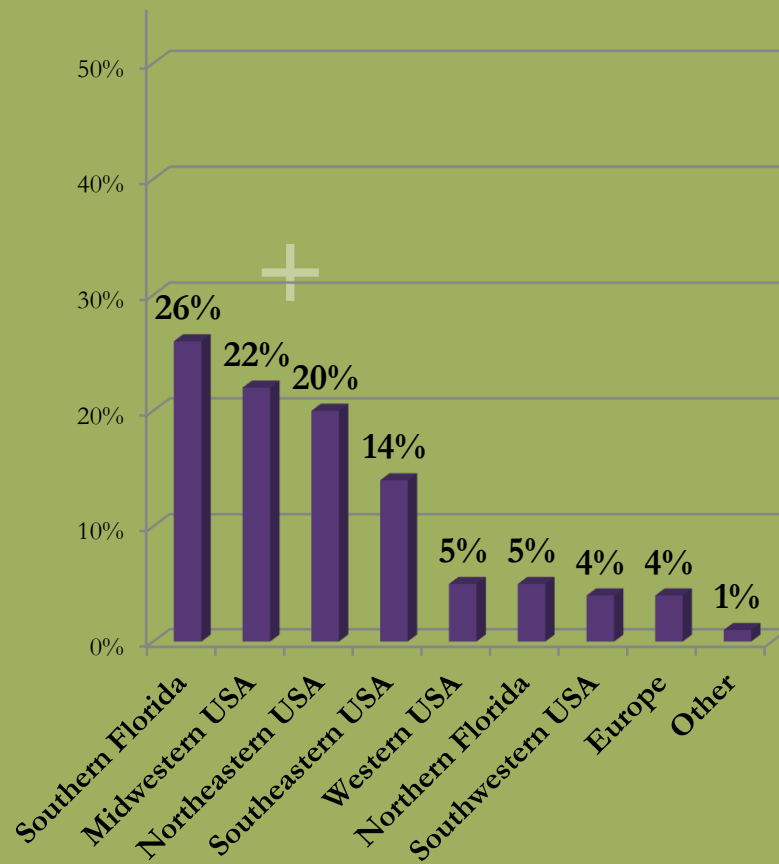


# Options that Southern Florida drivers would consider arriving by next trip

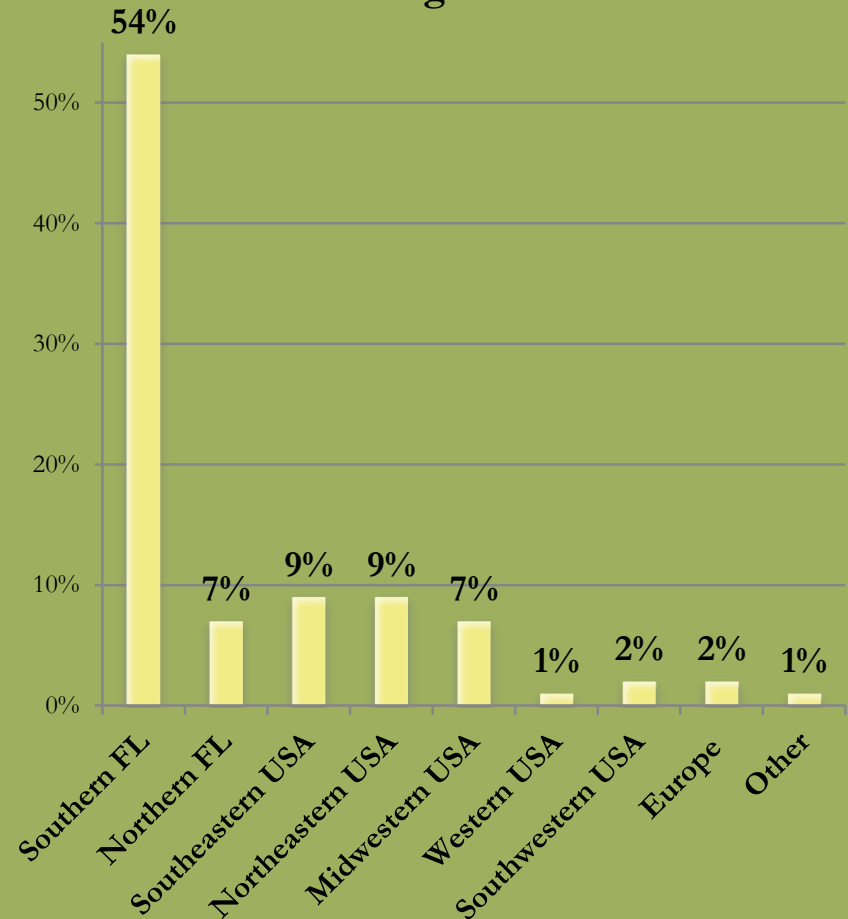


# The Potential Market:

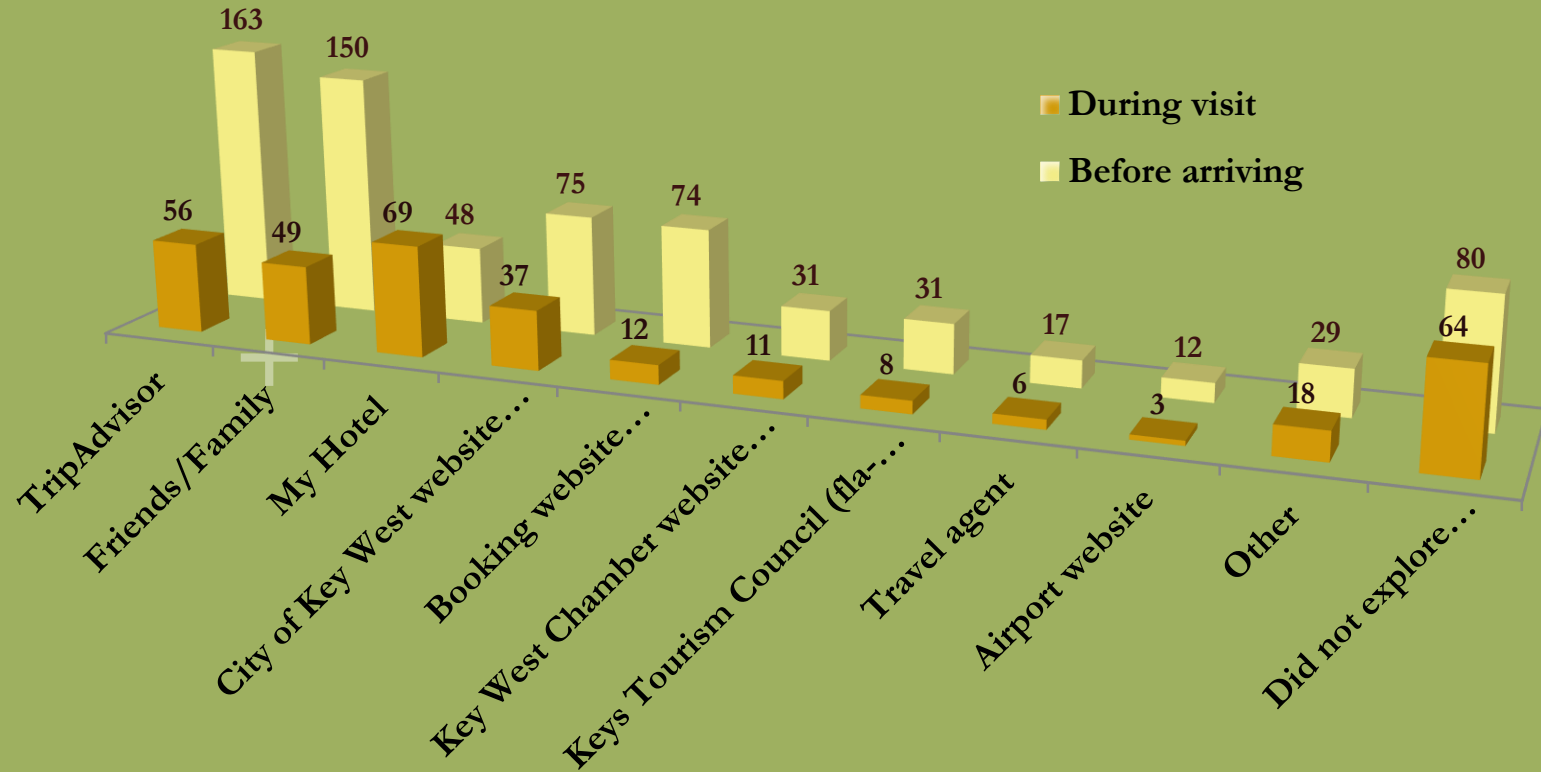
Where are those who would consider Key West Airport next trip visiting from?



Where are those who would consider Key West Ferry next trip visiting from?



# Transportation Information Sources





# Part 4

What now?



# Recommendations



Plan for on-island options that minimize barriers and maximize benefits of car-free travel



Increase ridership on low car-use arrival types



# Recommendations To Existing System

- Low car-use arrival types:
  - Key West Express Ferry (78% *zero day drivers*)
  - Key West Airport (67% *zero day drivers*)
- Marketing and promotions:
  - “Car free is Carefree”
  - Florida resident discounts
  - Family rates
  - Low season rates
  - Last minute deals

Increase  
ridership on  
low car-use  
arrival types



# Recommendations For Future Planning

Plan for on-island transportation that:

- Minimizes reported barriers
  - Having to wait around (high frequency)
  - Coordinating different schedules (easy schedule)
- Maximizes reported benefits of car free travel
  - Avoid parking fees
  - Avoid drinking and driving

Example: Downtown Circulator? →

**Minimize  
barriers and  
maximize  
benefits.**



# Recommendations On That Uber Thing

Frequently asked about.

Liked because

- Can Monitor GPS position
- Get the driver closest to you
- Choose quality of vehicle
- Rate / Read Drivers
- App Serves Everywhere
- Share rides

**Minimize  
barriers and  
maximize  
benefits.**





# Questions?

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